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METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE HAVING TORQUE MONITORING

Field Of The Invention

The present invention relates to a method for operating an internal combustion engine having the steps: setting the torque output of the internal combustion engine via a power actuator as a function of the signal from a driver command sender, forming a value for a maximum admissible torque of the internal combustion engine, forming a dimension figure for the actual torque of the internal combustion engine and comparing the dimension figure with that value, and triggering an error response when the actual torque exceeds the maximum admissible torque.

The present invention also relates to a control unit for controlling an internal combustion engine using such methods, as well as a use of such a control unit for controlling an internal combustion engine.

The triggering of the error response is supposed to prevent the internal combustion engine from outputting torque that deviates from the driver command, which, for example, reduces a desired engine braking effect, or may even lead to an undesired accelerating of the internal combustion engine and a vehicle driven by the internal combustion engine.

20 Background Information

Such a method, such a control unit and such a use are described in German Patent Application No. DE 199 00 740. This document refers to a known torque monitoring for an Otto engine, in which an actual torque of the internal combustion engine is determined from the rotary speed, combustion chamber charge (air mass) and the ignition angle setting. In addition, this document broadens the known torque monitoring to cover internal combustion engines that, at least from time to time, are operated using a lean fuel/air mixture. Examples of such internal combustion engines are Diesel engines and Otto engines having direct injection in an operation having stratified combustion chamber charging. Such internal combustion engines mostly operate unthrottled, so that their combustion chambers are usually charged